SEQUENCE LISTING

<110> Collins, Peter L.
      Murphy, Brian R.
      Whitehead, Stephen S.

<120> PRODUCTION OF ATTENUATED CHIMERIC RESPIRATORY SYNCYTIAL
      VIRUS VACCINES FROM CLONED NUCLEOTIDE SEQUENCES

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<151> 1997-07-15

<150> US 60/047,634
<151> 1997-05-23

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<151> 1997-05-09

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11
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231
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<210> 3
<211> 33
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:
      Positive-sense M gene fragment

<400> 3
actcaaataa gttaataaaa aatatcccgg gat                                        33


<210> 4
<211> 31
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:
      Negative-sense M gene fragment

<400> 4
cccgggatat tttttattaa cttatttgag t                                         31
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12

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<210> 5
<211> 18
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:
      Positive-sense primer uptream of SH gene

<400> 5
gaaagtatat attatgtt                                                      18


<210> 6
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:
      Negative-sense primer downstream of SH gene

<400> 6
tatataagca cgatgatatg                                                    20

<210> 7
<211> 16
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:
      Positive-sense M gene fragment

<400> 7
actcaaataa gttaat                                                        16


<210> 8
<211> 14
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:
      Negative-sense M gene fragment

<400> 8
taacttattt gagt                                                          14
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13

233

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<210> 9
<211> 28
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:   Forward PCR
      primer for NS1 gene deletion

<400> 9
gacacaaccc acaatgataa tacaccac                                        28


<210> 10
<211> 32
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:   Reverse PCR
      primer for NS1 gene deletion

<400> 10
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<210> 11
<211> 27
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:   Forward PCR
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<400> 11
ttaaggagag atataagata gaagatg                                         27


<210> 12
<211> 27
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:   Reverse PCR
      primer for NS2 gene deletion

<400> 12
gttttatatt aactaatggt gttagtg                                         27
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14

234

<210> 13
<211> 33
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Forward PCR
     primer for ablation of G gene start site

<400> 13
ttataattgc agccatcata ttcatagcct cgg   33

<210> 14
<211> 30
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Reverse PCR
     primer for ablation of G gene start site

<400> 14
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<210> 15
<211> 48
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:
     Positive-sense primer for intergenic region
     preceding the G gene

<400> 15
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<210> 16
<211> 51
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:
     Negative-sense primer for intergenic region
     downstream of F gene

<400> 16

gtgttggatc ctgattgcat gcttgaggtt tttatgtaac tatgagttaa g   51

<210> 17
<211> 13
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: G gene-end
      signal

<400> 17
agttattcaa aaa   13

<210> 18
<211> 48
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Positve-sense
      primer with G gene-end and F gene-start signals

<400> 18
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<210> 19
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<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:
      Negative-sense primer with G gene-end and F
      gene-start signals

<400> 19
gactgagtgt tctgagtaga gttggatgta gagggctcgg atgctg   46

<210> 20
<211> 12
<212> DNA
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<220>
<223> Description of Artificial Sequence: F gene-end
      signal of RSV A2

16

<400> 20
agttatataa aa   12

<210> 21
<211> 13
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: G gene-end
      signal of RSV A2

<400> 21
agttacttaa aaa   13